

1. Express product protein in tg milk

2. Express peptide affinity ligand/tag fusion in tg milk

3. Blend tg milk streams, allowing tagged ligand to bind to product

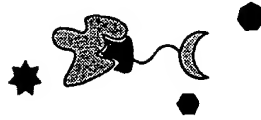
4. Affinity bind product/tagged ligand complex to Tag P-binding matrix

5. Elute purified product. Recycle tagged ligand (if desired).

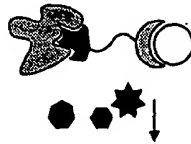
The diagram illustrates a two-step affinity purification process using transgenic milk.   
**Step 1:** A milk stream containing a product protein (represented by a star-shaped molecule) is shown.   
**Step 2:** A second milk stream containing a peptide affinity ligand (represented by a crescent moon) fused to a tag protein (represented by a star-shaped molecule) is shown.   
**Step 3:** The two milk streams are blended, allowing the tagged ligand to bind to the product protein.   
**Step 4:** The product/tagged ligand complex is bound to a Tag P-binding matrix (represented by a circular structure).   
**Step 5:** The purified product is eluted, and the tagged ligand is recycled (if desired).

Figure 1

1. Express both product protein and peptide affinity ligand/tag fusion in same tg milk



2. Affinity bind product/tagged ligand complex to Tag P-binding matrix



3. Elute purified product

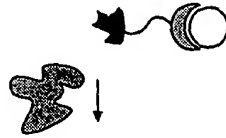
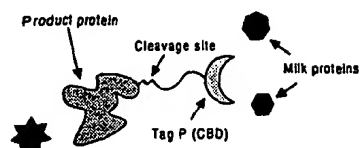


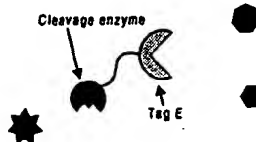
Figure 2

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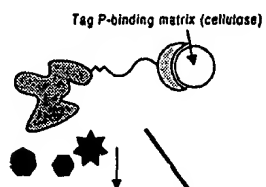
1. Express product protein/tag fusion in tg milk



2. Express cleavage enzyme/tag fusion in tg milk



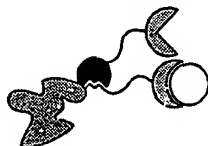
3. Affinity bind tagged product to Tag P-binding matrix



4. Purify tagged enzyme on Tag E-binding matrix



5. Cleave product off Tag P resin with tagged enzyme



6. Separate tagged enzyme with Tag E matrix. Recycle enzyme (if desired).

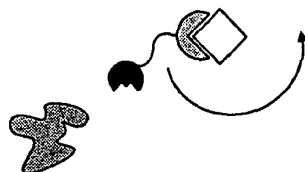


Figure 3